

Proposed Privatization Strategy Policy Framework for the Romanian Power Generation Sector

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TABLE OF CONTENTS

PAGE

SECTION I EXECUTIVE SUMMARY

I.	Relevant Background.....	1
II.	Overview of Findings and Key Recommendations	3
	A. Government of Romania's Privatization Objectives	3
	B. Consultant's Scope of Work and Overall Approach.....	6
	C. Comparative Summary of Options Reviewed	8
	D. Likely Ranges of Asset Valuations.....	21
	E. Hallmarks of a Sound Privatization Strategy	23
	F. The Hunton & Williams Recommendation	24
III.	Achievement of Important Political Goals	34
IV.	Mitigation of Probable Social Impacts and Disruptions.....	35
V.	Creation of Greater Competition in the Electricity Sector.....	35
VI.	Improving the Financial Strength of Public Sector Entities	36
VII.	Attainment of EU Environmental Standards Over Time.....	37
VIII.	Views of Potential Investors and Lenders	37
IX.	Recommended Next Steps	38

APPENDIX A INDICATIVE GENERATION ASSET BUNDLES	41
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APPENDIX B PRELIMINARY FINANCING PLAN FOR THE FIRST INDICATIVE BUNDLE	52
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APPENDIX C SUMMARY OF INTERNATIONAL PRIVATIZATION TRANSACTIONS BY COUNTRY	56
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SECTION II REVIEW OF THE ROMANIAN POWER SECTOR'S LEGISLATIVE AND REGULATORY FRAMEWORK

I.	The Constitutional Framework	62
	A. Legislative Competences	62
	B. The Judiciary.....	64

II.	The Legal Framework Supporting Restructuring And Privatization.....	65
A.	State Institutions Involved in Privatization of Termoelectrica and Hidroelectrica.....	65
B.	Privatization Methods Applicable to Termoelectrica	69
C.	Privatization Methods Applicable to Hidroelectrica.....	75
D.	Public/Private Joint Ventures.....	77
E.	Bankruptcy and Debt Restructuring.....	80
F.	Environmental Laws	81
G.	Employment Laws	83
H.	Property Laws	84
III.	The Regulatory Framework	87
A.	ANRE's Tariff Authority.....	87
B.	ANRE Independence	89
C.	ANRE's Licensing Authority	90
D.	Import/Export Regulations.....	91
SECTION III OVERVIEW OF ALTERNATIVE PRIVATIZATION METHODS AND THEIR POTENTIAL APPLICATION TO THE ROMANIAN GENERATION SECTOR		94
I.	Introduction.....	94
II.	Overview.....	94
A.	Concessions Method	95
B.	BOT and BOO Contract Method	98
C.	Public Auction Method	101
D.	Capitalization and Public Sale	102
E.	De-monopolization and Sale.....	106
F.	Sale + Investment Model	108
G.	Partial Sale and Pension Investment Method.....	110
III.	Summary of Best Practices from All Methods and Models	112
SECTION IV QUALITATIVE ASSESSMENT OF VARIOUS PRIVATIZATION MODELS SUITABLE FOR ROMANIAN POWER GENERATION SECTION		
I.	Privatization Priorities	114
II.	Impact of Privatization Options on Romanian Government Objectives	117
III.	Ranking of Privatization Alternatives.....	119

SECTION V EVALUATION OF TERMoeLECTRICA AND HIDROELECTRICA POWER GENERATION ASSETS AND PRIVATIZATION PLANS

I.	Country Overview.....	121
II.	Current Situation.....	122
	A. Recent Government Directives	122
	B. List of Existing Termoelectrica Plants.....	123
	C. List of Existing Hidroelectrica's Plants	124
	D. List of Nuclear Facilities.....	125
III.	Data On Termoelectrica Plants	125
IV.	Data On Hidroelectrica Plants	127
V.	Data on Fossil Fuel Resources	129
VI.	Review Of Generation Sector Plans As Outlined In The National Strategy For Development In Medium Term.....	130

SECTION VI ASSESSMENT OF SOCIAL IMPACT

I.	Overview.....	132
II.	Initial Observations	134
III.	Key Social Issues	135
	A. Unemployment.....	136
	B. Sector Employee Wages and Benefits	139
	C. Increased Tariffs	139
IV.	Initial Recommendations	141
	A. Unemployment and Salary Reduction Mitigation Measures	141
	B. Tariff Increase Mitigation Measures.....	141

SECTION VII ENVIRONMENTAL REVIEW OF EXISTING THERMAL GENERATION ASSETS..... 143

I.	Overview Of Environmental Regulations In Romania.....	143
	A. Air Pollution Decision Making Bodies.....	143
	B. Energy Sector Decision Making Bodies	143

II.	Sources Of Air Emissions	145
III.	Soil And Groundwater Pollution	146
IV.	Kyoto Agreement And Emissions Reduction.....	148
A.	Analysis of Potential Greenhouse Gas Benefits from Efficiency Upgrades of the Romanian Electric Power Sector	149
B.	Kyoto Estimated Baseline Emissions for Romania	149
V.	Conclusions And Recommendations	150
A.	Conclusions.....	150
B.	Recommendations.....	150
SECTION VIII SUGGESTED PRIVATIZATION IMPLEMENTATION SCHEDULE		152
I.	Phase II -- Privatization Preparation.....	152
A.	Financial Review and Valuation.....	152
B.	Technical Verification	152
C.	Tariff Impact Analysis and Pricing Structure	153
D.	Transaction Structure and Term Sheets	153
E.	Social Disposition Funds	153
F.	Structuring of Privatization Bundles.....	154
G.	Transaction Documents	154
H.	Emissions Trading and Environmental Compliance.....	154
II.	Phase III – Privatization Implementation	154
III.	Measurement of Impact Indicators	155

SECTION I

Executive Summary

I. Relevant Background

Over the past twelve years, the Romanian Government has initiated numerous changes and structural reforms in the general economy as a whole, and the power sector in particular, which have been designed to accelerate the transition from a centrally planned to a market-based economy. However, such well-intentioned policies and efforts were oftentimes marred by frequent starts, stops, and abrupt about faces in policy direction. More recently, the pace of these reforms has again increased, in large measure by a desire to be considered as a serious candidate for European Union accession in the early admission rounds.

In the electricity sector, for instance, Government Decision 29/1998 established the National Agency for Electricity Sector Regulation (ANRE) to serve as an independent regulator with the goal of implementing fair and independent regulations to ensure an efficient, transparent, and stable electricity market in Romania while at the same time protecting both consumers and investors alike. Similarly, electricity market liberalization has been proceeding at a steady pace since 1998. First, Government Decision 365/1998 established a commercial operator and market forecasting function within the newly formed National Electricity Company (CONEL). Next, Government Decision 627/2000 created a separate Power Market Operator (OPCOM) to serve as the electricity market administrator in an effort to provide an orderly, highly organized, and efficient framework for commercial electricity transactions within the wholesale power market of Romania. Then in October 2001, OPCOM became a full-fledged member of APEX. Finally, with respect to the opening up the overall electricity market, here too progress has been made. With implementation of Government Decision 22/2000, up to 10 percent of the Romanian retail electricity market was opened to competition encompassing both bilateral contracts and spot market bulk sales. The market was further liberalized to 15 percent later in the year through promulgation of Government Decision 982/2000. Today, fully 33 percent of the Romanian retail electricity market is theoretically open to competition, although only a small fraction of eligible customers have actually opted to switch to a negotiated bilateral supply contract thus far.

During this same time period, the asset ownership side of the electricity sector was also undergoing profound changes. For instance, during the year 1998, the vertically integrated monopoly of CONEL was abolished, and the basic activities of the power sector (generation, transmission, and distribution) were unbundled under Government Decision 365/1998 into four separate entities including: (1) S.C. Termoelectrica S.A. (Termoelectrica), which owns all thermal-fired power stations and combined heat and power (CHP) plants with the exception of 14-16 smaller CHP plants which are presently in the process of being transferred to the jurisdiction of local municipalities in the immediate vicinity of these plants; (2) S.C. Hidroelectrica S.A. (Hidroelectrica), which owns and operates all ten of the country's hydroelectric branches, including the strategic assets known as Iron Gates I and II under a joint international production agreement with

Serbia; (3) S.C. Electrica S.A. (“Electrica”), which presently owns and operates all eight regional electric distribution systems; and (4) C.N. Transelectrica S.A. (Transelectrica), which owns and operates the nation’s transmission system. The remaining company on the asset side is National Company “Nuclearelectrica” S.A. (Nuclearelectrica), which has always been owned and operated separately from both CONEL and its predecessor RENEL in the past. This company is responsible for maintaining Romania’s only nuclear unit, the 700 MW Cernavoda CANDU-type reactor fueled by natural uranium and heavy water, which will remain a strategic asset of the nation and therefore not be offered for eventual privatization.

With respect to current privatization plans and initiatives on the asset side of the Romanian electricity sector, the electric distribution system is finally being prepared for privatization, and a privatization advisor has already been appointed to assist Electrica. This belated action comes after criticisms were received from the European Union during negotiations under both the Energy and Market Reform Sections for EU accession. In addition, the Romanian Government has been seriously considering the need to begin this particular privatization process in an effort to meet covenants and prior commitments made under the IMF/World Bank Standby Facility. The European Union’s Phare Program and the EBRD have had similar unfulfilled covenants since 2000. According to several multilateral development bank sources, Electrica is planning to competitively privatize two regional distribution systems this year, most probably Banat and Dobrogea. In addition, it is also possible that Electrica will entertain direct negotiations with a German-French utility consortium for the City of Bucharest’s electric distribution system.

Regarding future plans to privatize existing generating assets in the Romanian electricity sector, the Medium-Term National Strategy for Energy Development of Romania covering the period 2001–2004 (Medium-Term Energy Strategy) calls for privatisation of 25–40 percent of Termoelectrica’s power generating assets by the end of this period, commencing with two major coal-fired power stations. However, no specific timetable has been set yet.

Consistent with the U.S. Agency for International Development’s (USAID) Mission Strategy for Romania to assist in accelerating energy sector restructuring, building a free market for energy for stimulating increased competition, and promoting a more economically sustainable and environmentally sound energy sector, USAID recently provided a major technical assistance package to the Romanian Ministry of Industry and Resources (MIR) to provide continuity to the Government’s plans for continued sector reform and privatization already begun with the distribution companies by expanding its planning efforts into the power generation sector. In this regard, the U.S. law firm of Hunton & Williams was selected competitively to assist MIR in reviewing privatization models utilized elsewhere in the region and throughout the world, to highlight best practices that would be most applicable to Romania’s unique circumstances, and to develop a proposed generation privatization strategy for consideration by the Romanian Government. This paper summarizes the findings of this assistance effort, and offers key recommendations for privatizing the power generation sector of Romania.

II. Overview of Findings and Key Recommendations

This section presents an overview of major findings and key recommendations developed by Hunton & Williams during the execution of its activities in support of the Government of Romania as it prepares to undertake the privatization of its power generation assets. As such, this section has been organized into six parts. The first segment reviews and comments on the stated privatization objectives of the Government of Romania for this sector. The second discusses the overall approach undertaken by Hunton & Williams in carrying out this engagement. The third presents a comparative summary of alternative privatization options and highlights the relevance of particular models to the unique circumstances faced by Romania today. The fourth provides a review of recent asset valuations based upon an analysis by Hunton & Williams of twenty-six recent power sector privatizations throughout the region in an effort to give the Government of Romania some indication as to what it might be able to expect from the privatization of its generation assets. The fifth discusses the hallmarks of a sound privatization strategy for Romania designed to insure that its initial offering will be well received in the marketplace, and prove to be highly successful. And finally, the sixth segment presents an overview of the recommended generation privatization strategy developed by Hunton & Williams for consideration by the Government of Romania.

A. Government of Romania's Privatization Objectives

1. Sustainable Development of Efficient Energy Markets

The stated goal of the Medium-Term Energy Strategy is the sustainable development of efficient energy markets to satisfy energy demand at competitive prices, under conditions of quality, supply security, and efficient use of resources, while at the same time limiting adverse environmental impacts. Privatization is seen as one of several key prerequisites, as well as a major financial means, to achieving this goal because of the large amounts of capital that will be required to repair, modernize, and upgrade existing energy facilities in an effort to provide reliable and efficient electricity to a growing economy and also to meet mandated EU emission guidelines, ash disposal best practices, and water quality standards over the coming years.

2. Key Privatization Drivers

The first important driver to privatization of the Romanian power sector is the desire on the part of the Government of Romania to attain European Union accession. In the broadest sense, Romania's integration into the European Union cannot take place without the achievement of accelerated economic growth rates in excess of the current community-wide average. In this regard, since energy is a major factor input to industrial and commercial enterprises alike, an important ingredient or precondition for stimulating the overall economy is the availability of reliable and competitively priced electricity. Privatization can inject both the necessary capital and competitive forces required to achieve these objectives over time. In addition, European Union accession requires that the Romanian energy industry and associated sectors be restructured, or at any rate reshaped, to make them more compatible with comparable European structures in an

effort to facilitate broader integration with European energy markets. Here again, privatization is a vehicle for achieving such an end. Similarly, privatization is required to leverage the investment capital necessary to comply with European environmental standards, guidelines, and requirements.

A second key privatization driver is the need to introduce new capital sources to modernize the power generation sector so that it will be both more efficient and environmentally compliant in the long run. The need for new capital in the sector is greatly impacted by the commitments agreed with the International Monetary Fund (IMF) and World Bank in their Structural Adjustment Facility program for Romania. Essentially, the Standby Facility for the Government of Romania limits the annual amount of new external debt that can be incurred for a particular sector, such as energy for instance. However, the investment requirements for plant modernization, efficiency improvements, and environmental retrofits in this particular sector far exceed the ceilings spelled out in the accord. Thus, the only way open for Romania to be able to undertake such major efficiency initiatives and required environmental investments is to leverage private capital through the privatization process.

While considered major privatization drivers in most emerging markets elsewhere in the world, the lack of new installed capacity, prevalence of rolling brown outs or even black outs, and an immediate and urgent shortfall of general revenues for the national treasury do not appear to be a major problem here, and are simply less applicable to the case of Romania today.

3. Discussion of Current Privatization Objectives

As acknowledged by the Government of Romania in its Medium-Term Energy Strategy, in order to cover the large funding requirements of the energy sector and introduce greater efficiencies in the sector through increased competition, it is necessary to speed up the pace privatization of energy distribution and generation activities. According to this National Strategy, distribution can be completely privatized during this period, while somewhere between 25-40 percent of all thermal power generation can be similarly privatized. However, these objectives will be very difficult to achieve if the Government pursues a policy of privatizing individual companies or assets one at a time, as has been the case in the past. The extensive due diligence review and approval processes required by both Government agencies and investors specific to power sector privatisations are very time consuming and lead to delays in completing transactions that the Government cannot afford under its Medium-Term Energy Strategy timetable. The Government of Romania also hopes that during this same time horizon, foreign investors will invest in and complete a number of the partially completed hydroelectric sites throughout the country, despite the fact that several independent consulting reviews have questioned the wisdom and cost-effectiveness of such a strategy.

The National Strategy further suggests that the objectives and benefits to be achieved through privatization of the power sector include the following:

- Consolidation of energy supply safety

- Fulfilment of such after-privatization objectives as sector competitiveness, modernization of infrastructure, strengthening of the financial viability of the sector, and the stimulus of economic growth
- Enhancement of social protection
- Leveraging of additional capital requirements
- Introduction of sounder management approaches and better corporate governance practices and behaviour
- Assistance and expertise in tapping potential export markets

Hunton & Williams has carefully reviewed the Government's privatization objectives, and would like to offer the following re-stated goals and objectives that can be achieved through privatization of the power generation sector. These include:

- Introduction of new capital sources to modernize the power generation sector so that it will be more efficient and environmentally compliant in the long run
- Development of a sector-wide solution rather than an asset-by-asset approach, so that Government financial transfers into the sector can be reduced over time
- The introduction of new competition into the market, which has been shown to lower electricity prices for industrial and consumer customers while increasing the availability of low-cost energy over time
- Progress towards achieving European Union accession in terms of environmental compliance, utility restructuring, and market liberalization
- Mitigation of social disruptions or unemployment that results from restructuring in the power sector
- Encouragement of greater plant operating efficiency and improved maintenance practices over time
- Expansion of reliable electricity and heat services to the people of Romania
- Provision of lower cost electricity over the longer term than might otherwise have been possible under the status quo
- Leveraging of private investment capital for plant modernization, upgrades, and even replacement of outmoded generation facilities
- Generation of revenue for the State Treasury from the initial sale of proceeds of generation assets, as well as increased tax revenues from these newly profitable operations in the longer run
- Future generation of additional revenue from the increased value of shares owned by both Termoelectrica and Hidroelectrică in these newly privatized companies

- Attainment of specialized knowledge regarding integrated European electricity market operations, as well as expertise useful in penetrating new export markets in an effort to generate hard currency
- Intermediate solutions to address the needs of the fuel supply sector, particularly Romanian coal mines and their employees who may be negatively impacted by privatization and energy sector reform

B. Consultant's Scope of Work and Overall Approach

1. Scope of the USAID-Funded Technical Assistance Effort

The Terms of Reference for this USAID-funded technical assistance effort stated that the Consultant was to provide policy analysis and assistance to MIR in its efforts to undertake the privatization of the Romanian power generation sector, and to address any major concerns that MIR may have regarding the manner in which this planned action is to be carried out. Specifically, Hunton & Williams was asked to carry out an in-depth analysis of the issues related to the future privatization of Termoelectrica and Hidroelectrica power plants. At a minimum, this analysis was to include the following activities:

- a. Undertake an extensive review of the Romanian power sector's legislative and regulatory framework, underlining the difficulties, barriers, and distortions that could impede the privatization process, as well as suggest possible changes and improvements to this institutional framework;
- b. Conduct a survey of the privatization models used worldwide and in the region specifically for the power sector;
- c. Perform a qualitative assessment of these models, and determine their potential applicability to the unique case of the Romanian power sector;
- d. Provide a neutral and independent point of view to MIR of Industry and Resources regarding its strategies and plans for privatizing existing Termoelectrica and Hidroelectrica power generation facilities;
- e. Suggest a proposed privatization strategy for the power generation sector that best and most realistically meets the unique needs and objectives of the Government of Romania given the current state of sectoral restructuring;
- f. Undertake an assessment of the social impact of different proposed measures, and make suggestions for the mitigation of any predicted impacts;
- g. Similarly, undertake an assessment of the potential impact on the environment of the preferred privatization scenario(s);
- h. Prepare a comprehensive plan and time schedule for implementation of the recommended privatization strategy;

i. Organize and arrange site visits for a group of Government of Romania power sector officials to at least two countries in the region who have undergone similar privatizations, and accompany these officials to highlight and lessons learned from such earlier privatization activities; and,

j. Plan and conduct one or more workshops to explain the results of the study, and to answer any questions that Government of Romania officials may have regarding the most appropriate ways to privatize the Romanian power sector.

2. Organization of Work Activities and Overall Approach

In carrying out this engagement, the Hunton & Williams team organized its work efforts and activities along the following lines. First, the team endeavored to meet with senior officials of both Termoelectrica and Hidroelectrica in an effort to solicit their inputs on the best approach to privatize their generation assets, and also to begin to develop a detailed database of all existing power generation assets, including operating characteristics, costs of generation, and some indication of their current condition and upgrade requirements. However, the senior leadership of Hidroelectrica declined all requests by the team for meetings, and officials at Termoelectrica only agreed to limited interviews. As a result of this overall lack of cooperation and general non-responsiveness from these two organizations, Hunton & Williams was forced to hire former employees and engineering professors knowledgeable about these assets, so that a credible database could be assembled. A summary of this generation sector database is presented in Section 5 of the Final Report, which is entitled Evaluation of Termoelectrica and Hidroelectrica Power Generation Assets and Privatization Plans. In addition, Hunton & Williams, in concert with a local law firm, undertook an exhaustive review of the current legal and regulatory framework. The detailed findings and recommendations from this review are presented in Section 2 of the Final Report, which is entitled Review of the Romanian Power Sector's Legislative and Regulatory Framework.

Second, on a parallel track, the Hunton & Williams team reviewed approximately 265 completed energy sector privatizations in 41 emerging markets worldwide since 1992, in an effort to develop a framework for evaluating alternative privatization models and strategies that may be applicable to the unique case of Romania. These various privatization models and approaches were organized into seven alternative privatization methods for further review and evaluation. The results of this worldwide survey are presented in Section 3 of the Final Report, which is entitled Overview of Alternative Privatization Methods and Their Potential Application to the Romanian Generation Sector. Next, these alternative privatization methods were subjected to a number of qualitative assessments in an attempt to identify the most appropriate privatization method for Romania. The results of this analysis are presented in Section 4 of the Final Report, which is entitled Qualitative Assessment of various Privatization Models Suitable for Romanian Power Generation Sector.

Third, the Hunton & Williams team undertook a multi-part strategy designed to validate the results of the earlier emerging market privatization review and subsequent qualitative assessments of selected privatization models and methods. This strategy encompassed the

following activities and approaches: (1) development of a stakeholder preference survey, which was sent to randomly selected representatives from local governments and prefectures, both state owned and private industrial companies, trade unions and NGOs, and residential electricity customers; (2) the conduct of a two-day workshop with senior officials and staff from the Ministry of Industry and Resources, Termoelectrica, Hidroelectrica, OPCOM, ANRE, and the Ministry of Public Finances to present the results of the earlier worldwide review, and also to jointly develop an optimal privatization model for Romania utilizing the most applicable and appropriate building blocks from other emerging market energy sector privatizations; (3) discussions with potential strategic investors, developers, and private utility operators to determine what would make an attractive power generation investment in a country like Romania; and (4) development of a preliminary project finance plan along with suggested backstop guarantees with such potential lenders as the EBRD, International Finance Corporation, Citibank, U.S. Export-Import Bank, and the Black Sea Trade & Development Bank for the first proposed asset offering. Using such results as guidance, the Hunton & Williams team developed a recommended privatization strategy for consideration by the Government of Romania. This recommendation is presented in this Executive Summary in Section F along with four suggested generation asset bundles for privatization over time which are presented in Appendix A of this Executive Summary. In addition, an associated preliminary finance plan for financing the first asset bundle is presented as Appendix B to this summary.

Fourth, and finally, the Hunton & Williams team performed a preliminary assessment of social impact issues specific to the privatization of generation in the Romanian context, the results of which is highlighted in Section 6, and also under an environmental review of existing generation assets which is summarized in Section 7. In addition, the team prepared a suggested privatization implementation schedule for consideration by the Government of Romania which is found in Section 8.

C. Comparative Summary of Options Reviewed

1. Introduction to Privatization Methodologies Evaluated

The Hunton & Williams team concluded that a variety of external market conditions would have a strong impact on the selection of a methodology and outcome of Romanian generation sector privatizations over the medium term. Among external factors to be considered by the government, we believe the following elements are most important to consider:

a. The global economy, generally, and energy markets, specifically, are in a period of economic slowdown after strong growth during the late-1990s

b. The availability of capital for energy sector privatizations is lower than in earlier years as a result of weak financial performance by several global energy competitors and a more conservative lending philosophy by numerous banks active in the sector

c. Some of the major energy privatizations in other countries have failed to deliver the results expected by investors or local citizens,

d. Potential generation company privatization tenders throughout the region including in Poland, the Czech Republic and Slovakia could potentially reduce investor capital available for Romanian opportunities

As a result of these factors, fewer power generation privatizations are being completed throughout all major regions of the world than during the more active investment period of the late-1990s.

In carrying out its initial survey of privatization models utilized elsewhere in the world including Central and Eastern Europe, the Hunton & Williams team evaluated approximately 265 completed energy sector privatization transactions in 41 emerging markets since 1992. Appendix C of this executive summary includes a listing of the various transactions including country and privatization methodology evaluated by Hunton & Williams. The Hunton & Williams team analyzed each country prior to the privatization to determine its applicability to the Romanian context, and then assessed each privatization after its completion to determine whether goals and objectives were actually achieved. In turn, these specific transactions were organized into seven broadly defined privatization deployment methodologies and reviewed with experienced investors, financing sources and consultants to determine whether they had applications for the current Romanian energy market.

The team selected several illustrative countries that had organized their individual privatization transactions using such methodologies, and reviewed with experienced investors, financing sources and consultants to determine whether they had applications for the current Romanian energy market. During the past ten years, Trade Sales have been the most widely used structure, accounting for nearly 50% of all privatizations surveyed. We have defined trade sales as an outright sale of equity or assets in a state-owned enterprise to a clearly defined strategic or financial investor, as opposed to a sale of rights to operate assets or a sale of equity to unknown investors, such as through a public offering. Trade sales are the most commonly used method for several reasons, including the ability of the highest investor bid to determine the ultimate privatization valuation, the establishment of clear forms of management oversight and shareholder responsibility following the sale, the enhanced probability of generating benefits including new capital investment, worker protections, competition and higher proceeds for the selling government that other methods cannot offer. Four of the methodologies evaluated by Hunton & Williams represent forms of trade sales, which we have grouped into its own category. A listing of these deployment methodologies, along with representative country models that were evaluated by the team in more detail, are presented in Table 1 below.

Table 1 – Most Commonly Deployed Privatization Methodologies and Country Models Evaluated

	Brief Description of Privatization Deployment Methodologies	Applicable Country Models Evaluated by H & W
1	Concessions	Argentina, Brazil
2	Build-Own-Transfer or Build-Own-Operate Contracts	Turkey
4	Capitalization of Generation Enterprises combined with a Public Offering	Czech Republic and Thailand
Outright Trade Sales of Assets through (Trade Sale Grouping):		
3	Trade Sale through Public Auction	Brazil, Argentina, Peru, Bulgaria, Albania, and Estonia
5	De-Monopolization of Generation Enterprises followed by a Trade Sale	Hungary and Poland
6	Trade Sale combined with a Minimum Capital Investment Expenditure	Panama and Poland
7	Trade Sale combined with Pension Fund Reinvestment	Bolivia

2. The Concessions Method

Under the concessions method, the government retains full ownership of all existing generating assets, as well as all rights and liabilities associated with these assets, while transferring operating control to the winner of the concession award. The concessionaire is granted operating control for a predetermined period of time, and typically retains a major share of the profits for the successful management of the generation company. Concessions are occasionally accompanied by incentives from the government, including supply contracts and sales guarantees to attract potential operators and/or investors. In this regard, the Brazilian government found it was necessary to offer long term supply agreements between generators and distributors as part of the concessions to neutralize some of the risk associated with operating the plants and to motivate investors to make capital investments without retaining ownership over the assets. In select situations, concessions have been granted for a maximum of 35 years, with one renewal period matching the length of the original contract. However, in general, most concession periods are for 25 years. There is some debate as to whether concessions are legal under Romanian law, given the modifications introduced by Ordinance 16 during the current year. Any decision to attempt a concessions-based privatization program in Romania would require a more thorough review of current legislation and potentially need changes to existing laws and statutes.

The concessions method has certain advantages for various stakeholders. First, government agencies retain ownership of energy assets, which may be politically more favorable than transferring majority ownership stakes to private investors. The generation company can also potentially receive funding to complete new construction or project upgrades by introducing western investors and partners into the financing picture. In

addition, the concession holder injects new management skills and know-how into the company that usually result in increased operating efficiencies. Moreover, several facilities or contracts can be bundled together under a single concession contract, which can have the effect of accelerating the overall privatization process. Finally, the bundling effect allows the government to package a variety of assets that will be attractive to investors in terms of investment size, fuel source, and asset composition.

On the other hand, the efforts of several countries to privatize existing facilities that required substantial modernizations or upgrades through concession contracts have yielded mixed results. In this regard, concessions were more successfully used as an incentive to build new facilities, rather than to attract investors to buy into older or less-competitive generation companies. Moreover, experience has proven that it is difficult to raise large amounts of capital that are required to modernize outdated facilities through concession contracts, as investors are hesitant to make major financial commitments to energy generating assets they do not own. Several investors in Latin American concession contracts have generated their required returns through employee layoffs and other cost cutting programs, rather than capital investments to increase capacity or improve efficiency. These elements have been very unpopular among local citizens and led to negative perceptions of privatization. Under most concession contracts, investors are given operating control and can make immediate job cuts, but are not responsible for providing employment guarantees or unemployment compensation. Finally, the concessions method does not really facilitate increased competition in the generating sector, and thus will not be able to bring downward pressures on consumer tariffs in the longer run. Concessions apply more to individual plants than to the overall sector, and do not offer the sector-wide approach desired by the Romanian government.

3. The BOT Contract Method

The build-operate-transfer (BOT) contract method has been used elsewhere in emerging markets, but most effectively in Turkey, to encourage foreign direct investment to build and productively operate power sector infrastructure facilities and then transfer them back to the government at the end of a previously agreed upon contract period of say 25-30 years. BOT contracts allow a host government to license a private sector partner to operate a generation or distribution facility for a predetermined number of years, during which time this partner retains all of the profits from operation. After the term of the contract, ownership in the asset reverts back to the host government. BOT contracts introduce a certain level of competition to the market, as well as new technologies, productive management, and new capital. The model was created during the late 1980's, primarily to stimulate the introduction of new capacity in countries experiencing major electricity shortfalls. BOT contracts differ from concessions in that the owner/operator assumes all rights and liabilities associated with property ownership during the contract period. In this regard, once a new BOT facility is operating commercially, the investor or consortium has full operational control over the plant and is responsible for making all decisions effecting the efficient operation and maintenance of the facility.

The consortium, typically backed by government guarantees, contributes new investment capital. Under the BOT model, the government has no authority to review investment

decisions made by the consortium during the contract term. BOT contracts in Turkey were typically structured for 25–30 years, with a renewal contract option for the same period thereafter. However, under no circumstances could the consortium or foreign partner own the facility for longer than 99 years. After the contract period, ownership and responsibility for the generation facility would transfer back to the host government.

It should be noted that Turkey offered various incentives to attract investors to BOT contracts, which were established over several years. The primary incentives offered to foreign investors under the BOT model included customs duties and fund exemption (on machinery and equipment imports), investment allowances (next year's investment allowance may be deducted from this year's taxable income), VAT exemption on importing, exemptions on stamp duties, energy support, land allocations, and credit supports. However, the single most important incentive turned out to be the provision of sovereign guarantees. Indeed, since the government stopped extending sovereign guarantees on BOT contract financings in early 2000 as a result of its deepening economic crisis, all BOT activity in Turkey has come to a halt. In this regard, the Government of Turkey has been singularly unsuccessful in concluding any new BOT contract since this decision was reached, and the whole BOT program is now in jeopardy.

In addition, the BOT model developed in Turkey was not effective in privatizing existing generation facilities, especially those plants that needed restructuring or major investments. Moreover, outright sales of generation and distribution companies by Turkey were largely unsuccessful, as investors preferred new construction projects to outdated, environmentally challenged facilities. Thus, the Turkish BOT model may even have undermined any future plans for privatization of the sector and the possibility of bringing in major asset sale revenues to the Treasury. However, it is important to note that the Turkish BOT model led to construction of 1,500 megawatts in new capacity, although such a program may have kept some foreign investors away from purchasing and upgrading existing plants that were in need of capital and outside expertise. Finally, despite the initial success of the BOT program in generating investment for new plant construction, over 85 percent of Turkish power generation capacity is still owned by federal and provincial government agencies such that potential gains from increased competition and improved operating efficiencies have yet to be fully realized. Thus, the Turkish experience points out that BOT contracts are not a sector-wide solution and are more successful at achieving limited results involving the development of new generation facilities, usually on a small scale.

4. Capitalization Combined with a Public Offering

The privatization method of capitalizing a company and selling all or part of its stock on a local stock exchange has been tried for energy companies in several emerging market countries, most notably in the Czech Republic and Thailand. This model provides a liquid market for resale of the company's stock, which can be useful in raising new capital for future investments. As a first step in the privatization process, responsibilities and assets utilized in electricity generation are transferred into a new joint stock company with 100 percent of its shares owned by the national government. This step creates a legal corporate structure around the enterprise to be privatized, under a restructuring process

most commonly referred to as capitalization. Next, the host government usually attempts to sell a large minority ownership position (25-40 percent) of the energy company to public investors through an initial public offering on the country's national stock exchange. The government may retain a large position (often 45-60 percent) that can be sold at a later date for a higher valuation. Employees or citizens often receive a small minority ownership stake at no cost or at a heavily discounted price (typically 10-15 percent) as a reward from the privatization process.

New outside capital raised in this fashion can either be contributed to the state treasury or else reinvested in the energy sector, both of which have benefits for the host government, and the newly privatized company improves its access to future debt and equity financing sources through such an initial stock listing. However, the local stock market must be strong and liquid enough to absorb such a major infrastructure offering. The Bucharest Stock Exchange still has a relatively small market capitalization, and could not at present provide the investor base to support a utility industry offering of much size. In addition, without a strategic investor, the privatized company does not gain access to new management expertise or to western financing sources. Also, difficult but necessary restructuring decisions can often be postponed because of the absence of a strong outside shareholder. Moreover, as the remaining largest shareholder in each of the country models evaluated for this method, the host government was frequently required to provide sovereign guarantees to secure bank financing in newly privatized companies, and in some cases even forced to contribute funds from the state treasury to cover operating losses. Finally, a publicly traded company bears substantial valuation risk on an emerging markets stock exchange. Public valuations can fluctuate wildly, and most energy sector values in Eastern Europe have declined sharply during the past two years or since their initial public flotation.

The privatization of CEZ, which provides 70% of the electricity in the Czech Republic, began as a public offering of minority shares in 1995. Many of these shares were initially given to citizens as part of that country's voucher privatization program. In 2001, the Czech Republic announced its intention to privatize its remaining stake in CEZ through a trade sale. Included in the trade package were eight regional distribution companies and two nuclear power plants. The CEZ privatization included very strict bidding instructions that investors were required to meet, including a ban on selling operating assets for ten years and a requirement to purchase domestic coal for fifteen years. The CEZ privatization was discontinued earlier this year because neither of the bids received could meet both the minimum price requirement and the restrictive operating conditions requested by the government. The Hunton & Williams team believes that the failure of the CEZ privatization was more a factor of the stringent bid requirements that alarmed potential investors than of the large size of the trade sale offering. Several qualified strategic investors initially showed strong interest in CEZ and only withdrew their bids when it became apparent that the required operating conditions would restrict a buyer's control over their investment.

5. Outright Trade Sales of Assets Methodologies

In the strictest sense of interpretation, neither the concessions method nor the BOT contract method can really be considered pure privatization models. Concessions allow governments to retain ownership of all existing generating facilities, which does nothing to foster increased competition in the electricity sector, and in any event, do not generally lead to major new investments in plant modernization and required environmental retrofits. Similarly, BOT contracts do nothing to improve operating efficiencies or environmental compliance of existing facilities. On the other hand, both of these approaches are especially adept at encouraging the construction of new capacity. Unfortunately, Romania currently has a significant capacity surplus of somewhere between 4,000-6,000 MW of installed capacity, and does not really require any new generating capacity for the foreseeable future, especially if a second nuclear unit is built.

Fortunately, there exist several privatization models that can be collectively grouped under the general heading of outright sales or tenders of assets methodologies (we have categorized these methods as the Trade Sale Grouping), that are very effective in addressing the Government's stated privatization objectives, including fulfillment of sector competitiveness, modernization of existing infrastructure, introduction of sounder management approaches and better corporate governance practices, enhancement of social protection, leveraging of additional capital requirements, strengthening of the financial viability of the sector, and the resultant stimulus of economic growth. In this regard, the Hunton & Williams team evaluated four such privatization models, including: (1) the public auction method; (2) de-monopolization of generation enterprises followed by a trade sale; (3) a trade sale combined with minimum capital investment expenditure; and (4) a trade sale combined with pension fund reinvestment. All lead to increased competition in the electricity sector, the leveraging of private capital, modernization of existing generation assets, and generation of significant budgetary revenues for the Treasury. It is worth noting, however, that these methodologies as presented do not offer a sector wide approach to privatization and focus exclusively on sales of individual generation plants, as most countries have done. The individual asset approach allows investors to select the best generation facilities in a country to purchase and often leaves the host government with undesired loss-making assets that continue to drain funds from the national treasury. Each of these approaches is briefly described below.

The public auction method of enterprise privatization is conducted through public bidding by pre-qualified buyers in conformity with established conditions of sale. Auctions can be successful when a government is certain that the company being sold has strong investor appeal. In addition, auctions typically have clearly defined conditions, with the company valuation (or price) serving as the primary determinant of the winning bid. Auction guidelines must be kept very simple, and should focus on achieving the highest price for the electric utility company being offered. Moreover, auctions often involve well-known single facility companies that require minimal due diligence efforts prior to submitting a bid. However, auctions should only be conducted when a government is certain that the company being sold has strong investor appeal. Furthermore, bids must have minimal conditions (usually without employment guarantees) to be successful, and bid instructions to investors must be clear and without

complications. Lastly, large auction privatizations are extremely risky in the current market, since receiving no legitimate offers may sharply depress the value of the company and make a subsequent offering that much more difficult. It is worth noting that very few significant auctions have been completed in the energy sector worldwide during the past two years.

The de-monopolization and sale model has the potential for creating healthy competition among post-privatization generating companies. It has been effectively employed in such emerging market countries as Poland and Hungary, and is typically initiated by first transferring responsibilities and assets utilized in electricity generation into a single joint stock company with 100 percent of the shares owned by the national government. Next, individual generation facilities are established as separate joint stock companies, thereby breaking up this monopoly. The government then establishes a priority list for privatizing individual companies through trade sales to strategic investors one at a time, generally through full solicitations rather than negotiated sales so as to maximize the purchase price for any given set of generating assets. In most cases, the valuations received by the government have been higher for selling off individual parts of the energy monopoly over time, rather than selling the whole enterprise at the outset. In addition, it should be noted that one successful transaction could help improve the price and terms of later transactions. On the other hand, if the first one or two privatizations fair poorly, it becomes very difficult to complete subsequent deals. Moreover, investors are reluctant to buy loss-generating assets, and may assign lower valuations to a generation company when required to purchase less desirable facilities along with extremely efficient or modernized facilities. This method of selling individual generation companies will encourage investors to pick the best assets in a country to bid on, while often leaving the host government as the owner of loss making entities that continue to drain the state treasury. In addition, strong, profitable generation companies or asset groupings may receive several offers, while the government has a difficult time selling unproductive or loss-generating entities, and may be forced to keep and subsidize such facilities for the foreseeable future. Lastly, the typical transaction structure under this method generally includes majority or operating control of the post-privatization sale. Of approximately 265 reported energy sector privatizations evaluated by the Hunton & Williams team, strategic investors either received operating control from the outset or else purchased majority control within five years in over 70 percent of all completed deals. In this regard, investors typically prefer opportunities where they can gain majority or operating control, so they can implement their own management strategies in an effort to optimize the expected returns from such a potential investment.

Under the sale plus capital investment model, investors are requested to bid on purchasing a generation company, plus making longer-term capital expenditure commitments to invest in new capacity or to rehabilitate existing facilities. This model is applicable to privatizations that require a large capital investment following a sale. In this regard, investors can be required to maintain a given level of available capacity or even achieve certain environmental emission standards over time. In any event, the decision is generally left to the new owner as to how he specifically intends to achieve such requirements, whether by upgrading existing capacity or replacing with new capacity.

Poland has generally followed this model since the introduction of its privatization program for the generation sector in 1995. The Polish model has led to the privatization of 10 generation companies over the past seven years, representing 26% of Poland's generation capacity available for dispatch. Typically, an investor purchases a large percentage of stock in the generation company for cash, which is contributed to the Polish State Treasury. The investor also commits to invest a minimum amount of funds over time that are put directly into the newly privatized generation company. As these investments are made, the Polish government's ownership share is diluted and the strategic investor begins to own a larger overall percentage of the company. During early privatizations, the Polish government sold majority control (at least 50%) to strategic investors, who then increased their ownership percentage further as capital investments were made in the company. More recently, Poland has offered a 35% equity share in privatized generation companies to strategic investors, with the opportunity to gain majority control as the new investments are made. It is worth noting, however, that strategic investors did receive operating control over all daily decisions at the generation company in most cases even when their ownership position was at the initial 35% level. Operating control is a requirement of most strategic investors on privatization opportunities in Central and Eastern Europe. The major drawback of this method for Poland has been the slow pace of privatization and the numerous delays encountered on many transactions. More recently, outside constituents including trade unions and suppliers have grown more aggressive in demanding new conditions that have further slowed the pace of generation privatizations. In order to accelerate privatizations in the future, Poland is bundling together electricity distribution companies scheduled for trade sales over the next two years.

The Government of Panama utilized this method successfully to bring its generation plants in line with global environmental standards, while at the same time increasing its hydroelectric capacity mix. However, it should be noted that investors would factor such required investment commitments into their overall offer price. The sale plus capital investment model typically begins with the government dividing state owned assets into groups that would be attractive to investors in terms of size, profitability, and operating capabilities. The Government then solicits bids from both foreign and domestic investors for these state-owned assets. The bids are coupled with plans to make additional investments in existing facilities and/or future projects. The winning bid is comprised of the most attractive combination of purchase price and capital investment commitment. Under this structure, investors typically receive operating control, while the government retains a substantial ownership position in the assets. The only major downside is that from the employee perspective, this method generally results in an immediate change in management as well as job cuts. However, such impacts can be mitigated if Government utilizes a portion of the sale proceeds to fund job placement and retraining programs.

The partial sale and pension investment model developed by Bolivia in 1995 achieved success in raising new investment capital for local generation enterprises, while at the same time sharing the benefits and proceeds from privatization more broadly with workers and pensioners. The single most distinguishing feature of this method is that the sale proceeds stay with the privatized company to finance future investment, rather than flow to the Treasury. Another unique feature of the Bolivian model is that the

Government's remaining share of each newly privatized company (approximately 50 percent) is to be held until such time as the new company can be listed on the local exchange, and then distributed to the local citizenry in the form of shares to augment retirement incomes. This method was developed for privatization situations in which the asset or company for sale was likely to generate strong investor interest, where the government can readily afford to give up the direct proceeds of the sale, where popular participation in the form of share distributions may avoid the political backlash of allowing the investor to retain his full bid price for plant modernization activities, and the sector is in dire need of significant new investment capital to upgrade outdated facilities. Another precondition is that the country already has laws on the books that allow for separate private pension funds to be created, or else has previously developed a mechanism whereby the transferred shares can be owned in the name of local citizens. This model has three drawbacks: (1) none of the cash proceeds from the sale of the assets are directed back to the Treasury for use by Government as it sees fit, which may become very politically unpopular; (2) pensioners do not receive funds from the pension plans until a future liquidity event takes place such as a public offering or re-sale, which may take several years to complete if not longer; during which time the valuation of the electricity company may increase or decrease thus in effect placing all of the risks on the pension investors; and (3) there is no provision to immediately assist workers who have lost their jobs as a direct result of such a privatization.

6. Comparative Evaluation of Alternative Privatization Options

Romania has a number of alternative privatization, and by implication, ownership structures from which to choose from as it prepares to privatize and restructure its power generation sector, although only three major methodologies make any sense at all given present circumstances and conditions. These include: (1) concessions; (2) BOT contracts; and (3) several variations of outright sales or asset divestitures as described above. Each entails different rewards and levels of progress towards fulfillment of the primary objectives set out in the Medium-Term National Strategy for Energy Development of Romania covering the period 2001–2004. In addition, each offers different levels of ongoing involvement by both government and the private sector as illustrated in Table 2 below which compares these three alternatives to the current public sector monopoly.

Table 2 – Ownership Involvement and Responsibilities Matrix

Alternative	Asset Ownership	Operations and Maintenance	Capital Investment	Commercial Risk	Duration in Years	Ongoing Government Involvement
State-Owned Monopoly	Public	Public	Public	Public	Indefinite	High
Concessions	Public	Private	Private	Private	25-30	Moderate
BOT Contracts	Private	Private	Private	Private	20-30	Moderate to Low
Sales or Share Divestitures	Private	Private	Private	Private	Indefinite	Low

In addition to the ownership changes indicated above, the overall privatization methodology selected by the Government of Romania will also have a major impact on a number of different constituencies and stakeholders. In this regard, privatization of the power generation sector will impact the following constituent groups, with each experiencing particular risks and benefits that need to be considered in ranking the various privatization options under consideration as indicated below:

Private and Remaining Public Sector Generating Companies—Ability to survive and grow, prospects for sustained profitability, competitive position in the domestic energy market, export opportunities, capital investment needs, and ability to attract potential strategic partners, institutional investors, and/or additional debt financing

Employees—Job creation or loss, changes in compensation, benefits, training, pension or health care benefits, the potential to advance or acquire other marketable skills

Romanian Consumers and Rate Payers—Energy costs, tariffs and prices, reliability of service, dependability of future supply and infrastructure requirements, overall impact on the quality of life in both the community and nation at large, and generation of sufficient funds to support pension obligations over the long term

Suppliers—Ability of the privatization process to offer long term supply agreements to coal mines that are dependent on generation companies for the majority of their revenue, also the ability to generation plants that need specific fuel sources (primarily coal) to continue these supply relationships

Investors—Attractiveness of the enterprise, potential returns on equity, ability to compete in the domestic market, barriers to entry, and long-term growth opportunities and prospects for the future

Government of Romania—Stability of supply in the energy sector, investment requirements for remaining governmental assets in the sector, EU accession requirements, employment losses, and changing of laws and regulations

Environment—Greenhouse gas emissions, trans-boundary impacts, quality of life, and control of environmental externalities

The matrix in Table 3 below presents a comparative analysis of the likely benefits to each of these constituent groups based upon privatization model deployed.

Table 3 – Potential Benefits to Various Constituent Groups Depending Upon Privatization Model Selected

Privatization Model	Generating Company	Employees	Electricity Consumers in the Long Run	Investors	Romanian Government and EU Accession	Environment
Concessions	Low	Low	Low	Moderate	Low	Low
BOT Contracts	Low to Moderate	Low	Moderate	Moderate to High	Low	Moderate
Auctions	Low	Low	Low	Low	Moderate	Low
Capitalization and Public Sale	Moderate	Moderate to High	Low to Moderate	Moderate	Moderate to High	Low
De-Monopolization and Sale	Moderate to High	Could be High	High	Moderate	High	Moderate
Sale and Capital Investment	High	Could be High	High	High	High	High
Partial Sale and Pension Investment	High	Moderate	High	Very High	Moderate	High

As can be seen above, trade sales (e.g. - de-monopolization and sale, sale and capital investment, and partial sale and pension investment) seem to achieve the highest overall level of benefits for the most constituent groups. In addition, these findings were further validated by and essentially track the answers and rank orderings provided by 59 different respondents to a user survey sent out to 138 individuals and organizations on a random sampling basis from among the following stakeholder groups: (1) local and municipal governments; (2) industrial users; (3) labor organizations and NGOs; and (4) residential customers. Weighted preferences were applied to the responses from the various constituent groups to develop a preferred privatization model for each group. The results of this analysis are presented in Section 4 of the Final Report.

One last method utilized by the Hunton & Williams team to evaluate and rank each of the various privatization models (previously discussed in Section 4 above) against the team's re-stated privatization goals and objectives for the Government of Romania, including: (1) progress towards compliance with EU accession requirements for the sector; (2) introduction of private operators and competition; (3) improved plant operating efficiencies and maintenance; (4) expansion of reliable, low cost energy throughout Romania; (5) provision of lower cost electricity over the longer run; (6) leveraging of new investment capital for plant upgrades; (7) generation of revenue for the Treasury; (8) generation of future additional revenue from increased value of shares; (9) attainment of expertise regarding European market operations and export markets; and (10) mitigation of social disruptions. The results from this comparative ranking analysis are presented in Table 4 below. For the purposes of this analytical comparison, the trade sales grouping encompasses the following specific models: de-monopolization and sale, sale and capital investment, and partial sale and pension investment since they all behave identically.

Table 4 – Attainment of Selected Privatization Goals and Objectives by Privatization Methodologies Evaluated

Privatization Objectives	Concession Method	BOT Contracts	Auctions	Capitalization & Public Sale	Trade Sales Grouping
Progress towards EU accession requirements			●	●	●
Introduction of private operators & competition		●	●		●
Improved plant operating efficiencies	●	●	●		●
Expansion of reliable, low cost energy	●	●			●
Provision of lower cost electricity in long term		●	●		●
Leveraging of new investment capital		●		●	●
Generation of revenue for the State Treasury			●	●	●
Future revenue from increased value of shares				●	●
Expertise on European market operations	●				●
Mitigation of social disruptions and impacts			●	●	●

As can be seen in the table above, the privatization methodology that best suits the Government of Romania from the standpoint of achievement of key privatization goals and objectives is the trade sales grouping methodology, which comprises three of the models reviewed earlier, including the de-monopolization and sale, sale and capital investment, and partial sale and pension investment models. However, many of the country-specific applications for these three models possess one or more useful concepts and building blocks that may be applicable to the unique circumstances facing Romania today as discussed in the following section.

7. Applicable Building Blocks and Best Practices for Romania

The Hunton & Williams team has concluded that a combination of elements from the various trade sales methodology models will provide the most attractive privatization structure for the Romanian generation sector. As such, this methodology not only maximizes potential benefits to the largest number of constituent groups and stakeholders, but also achieves or attains every one of the re-stated privatization goals and objectives that the Government of Romania expected to achieve during an extended privatization process. While the Government may choose to structure trade sales either as outright share transfers or new joint ventures between a strategic partner and both Termoelectrica and Hidroelectrică, the most important elements or building blocks that the Government of Romania should consider incorporating into a special adaptation of the more general trade sale methodology include the following:

- Partial de-monopolization of both Termoelectrica and Hidroelectrica
- Sale of a large enough share of each generation asset bundle or facility being offered for bid to provide unambiguous operational control to winning strategic investors, without hindrance by the Government through some form of “golden share”
- Requirements that investors make investment commitments to either modernize and upgrade existing generation assets or else replace with new capacity to meet mandated European emission standards for these asset bundles, but in a manner of their own choosing
- Agreement on the part of the new owners of these generation assets that they will maintain a certain minimum level of available capacity for dispatch to the grid, but in a manner of their own choosing
- Allocation of a certain percentage or amount of revenues received from privatization of generation assets for creation of a special temporary fund to be utilized to mitigate the disruptions of labor force reductions that are likely to occur, whichever privatization model is deployed

Given the low level of liquidity and relatively small capitalization of the Bucharest Stock Exchange, a sale of generation companies through public share offerings has limited appeal or chance of success during the next two years. Also, the Hunton & Williams team believes that a certain degree of de-monopolization before privatization is essential to insure competition and long-term growth in the sector. Termoelectrica would have a difficult task in competing directly against Hidroelectrica in the short term, and a private duopoly of these two companies would be unlikely to bring true competition or service and reliability improvements to the power sector in any event. As shown by other emerging market countries that have completed privatizations of their energy sectors, the market achieves higher levels of efficiency and overall competition whenever several independent generation and distribution companies are able to operate on a national level over the long term.

In summary, modified trade sales offer the only privatization method that allows the Government of Romania to achieve all of its stated privatization goals and objectives for the power generation sector. At the same time, trade sales generate the greatest financial benefits to constituents in Romania, but also require the greatest level of political commitment in order to successfully complete such a process and to achieve the full benefits for each of the various stakeholder and constituent but in a manner of their own choosing groups from such a privatization strategy.

D. Likely Ranges of Asset Valuations

Potential strategic investors will determine overall asset valuations for electric utility generating companies based on many or all of the following measurements and financial metrics:

- Share valuations of comparable publicly traded generation companies in Eastern Europe or other emerging markets

- Valuations of recent trade sales of similar power generation companies or plant assets
- The present value of projected operating cash flows earned by the generation company or specific facilities being offered over the next several years
- Book value (assets less liabilities) of the generation company or asset bundles being sold

In addition, investors will calculate the cost of necessary investments required to both meet future environmental standards and also to upgrade, rehabilitate, and modernize the generation company or the asset bundles being offered, which will be reflected in their offer or bid prices. Investors may also discount their offers based on an assessment of the political and economic risks involved in that particular country, the availability of local ongoing financing, domestic market growth rates, currency stability, and energy export potential. Moreover, it should be recognized by the Government of Romania that valuations of energy generation companies and/or associated asset bundles in the region declined in 2001, reflecting the global economic slowdown, excess capacity, and reduced demand in the market for such investment opportunities. It should be further noted that such a downward trend has continued unabated into 2002, as American investors and independent power producers (IPPs) in particular have reduced their activity in the privatization marketplace in developing and emerging market economies.

Accordingly, public generation companies are currently valued at a discount to their underlying asset values, and have produced sub-standard returns for investors during the past twelve months as indicated in Table 5 below, which presents average valuation ranges for twenty-six of the most recent power sector privatization transactions in Central and Eastern Europe as well as several republics of the former Soviet Union.

Table 5 – Average Valuations for Recent Privatization Transactions in the Region

Selected Financial Metrics and Indicators	Average Market Valuation for Twenty-Six Recent Public Utility Privatizations
Annual Sales (Turnover)	0.8 Times Turnover
Annual Operating Income	5.9 Times Operating Income
Book Value (Assets Less Liabilities)	0.6 Times Book Value
Megawatts (MW) of Annual Capacity	\$125,000 per MW
Return on Invested Capital	5.75 Percent

Probably the single most relevant and also easiest to apply indicator cited above is the average valuation per Megawatt being offered. As a result, the Hunton & Williams team further analyzed expected valuations by selected range of useable capacity in each of these twenty- six power sector privatizations to determine whether size of assets being offered had any bearing on overall valuation. The average valuation results for several relevant capacity ranges are presented in Table 6 below.

Table 6 – Average Valuations Per Megawatt for Selected Ranges of Useable Capacity

Range of Useable Installed Capacity Being Offered	Average Valuation Ranges for Twenty-Six Recent Public Utility Privatizations
Less than 500 MW	\$45,000 - \$125,000 per MW
Between 500 and 2,500 MW	\$70,000 - \$150,000 per MW
Greater than 2,500 MW	\$100,000 - \$175,000 per MW

As can be readily observed above, the larger the amount of useable capacity being offered, the greater the average valuation per Megawatt in these particular regional power sector privatizations.

E. Hallmarks of a Sound Privatization Strategy

So the question must finally be asked: how can Romania insure a well subscribed and highly successful bid competition for its initial privatization offering, while at the same time achieve the highest possible bid valuations given the current marketplace and climate for emerging market privatizations? The key to answering this important question lies in understanding precisely what strategic investors are looking for in today's saturated and under performing marketplace for utility privatizations. In this regard, the Hunton & Williams team sounded out and worked closely with several potential major investors, IPPs, and interested European electric utilities in an effort to more fully understand the fundamental ingredients and components of an attractive privatization package from the perspective of the likely investor community. The results of this informal survey are summarized below, and indicate that to be successful in today's highly competitive marketplace, a power generation privatization strategy must encompass the following key hallmarks or elements:

- The potential investment must be for at least 2,000 MW in useable generation capacity before it will be considered attractive to potential strategic investors
- The assets being made available should be offered either debt free or at any rate without burdensome debt, or else the investor will heavily discount his price offered
- The strategic investor must have operational control of the utility or assets being made available, which in the case of Romania means at least majority of the outstanding stock or voting rights in the new joint venture company plus one share, with no golden shares being retained by the Government
- The generation assets being made available to the strategic investor must consist of both thermal and hydroelectric generating capacity so as to insure a cost competitive bundle, since this new entity will still have to compete head to head with both Hidroelectrica and Cernavoda for merit order dispatch

Similarly, from the Government's perspective, a sound privatization strategy must meet certain minimum objectives and social obligations, including but not necessarily limited to the following aspects:

- Some provision must be made for the mitigation of temporary social disruptions brought on by work force reductions and forced early retirements resulting from the more efficient operation of these facilities by the private sector over time
- It must foster greater energy supply security for the country as a whole
- It must also result in making the remaining public sector entities more financially viable than they were before the proposed privatization initiative
- Finally, it must result in a truly competitive electricity sector so that longer-term tariffs to residential, commercial, and industrial customers alike will be lower than they might otherwise have occurred without privatization and increased competition in the marketplace

F. The Hunton & Williams Recommendation

1. Generating Capacity Available for Privatization

While Romania currently has an overall installed electric generating capacity of approximately 19,596 MW. Many of the thermal units are in excess of thirty years of age and in extremely poor operating condition. Moreover, some even include backpressure turbines that will never be operated again, since the industrial facility for which the plant provided process steam has long ago been shut down or dismantled. Therefore, only 16,531 MW is actually available for dispatch. When transfers of smaller combined heat and power plants (CHPs) to the municipalities are considered and such strategic assets as Iron Gates I & II and the Cernavoda Nuclear Power Station are subtracted from this amount, the remaining available capacity which potentially could be privatized is about 12,808 MW as indicated in Table 7 below.

Table 7 – Overview of Romanian Generating Capacity Available for Privatization

Plant Type	Current Available Capacity	Strategic or Transferred Asset	Potential Capacity Subject to Privatization
Large Thermal Plants	8,238 MW	0	8,238 MW
Smaller CHPs	1,688 MW	1,688 MW	0
Hydro Cascades	5,905 MW	1,335 MW	4,570 MW
Nuclear Station	700 MW	700 MW	0
Total	16,531 MW	3,723 MW	12,808 MW

The specific power generating assets that comprise the total net capacity available for ultimate privatization in Romania today, encompassing units from both Termoelectrica and Hidroelectrica, are summarized below in Tables 8 and 9 respectively.

Table 8 – Summary of Potential Thermal Assets to be Privatized

Plant #	Plant Name	Fuel	Installed Capacity	Available Capacity		Electricity Production Delivered	
			MW	MW	%	GWh	%
1	Borzesti Cd TPP	Gas	420	420	5.10	469.836	1.87
2	Braila TPP	Oil & Gas	960	420	5.10	1,046.033	4.16
3	Brazi CHP	Oil & Gas	710	310	3.76	519.119	2.07
4	Bucuresti Sud CHP	Oil & Gas	550	450	5.46	1,043.000	4.15
5	Bucuresti Vest CHP	Oil & Gas	250	250	3.03	794.619	3.16
6	Grozavesti CHP	Oil & Gas	100	100	1.21	291.812	1.16
7	Bucuresti "Progresul" CHP	Oil & Gas	200	200	2.43	506.351	2.02
8	Bucuresti "Titan" CHP	Oil & Gas	8	8	0.10	14.070	0.06
9	Constanta – Palas CHP	Oil & Gas	250	100	1.21	353.696	1.41
10	Craiova CHP	Coal & Oil	300	300	3.64	1,028.144	4.09
11	Mintia TPP (Deva)	Coal & Gas	1,260	1,050	12.75	4,068.274	16.19
12	Doicesti TPP	Coal & Oil	400	400	4.86	536.218	2.13
13	Galati CHP	Oil & Gas	535	375	4.55	1,048.214	4.17
14	Isalnita TPP	Coal & Oil	630	315	3.82	1,377.954	5.48
15	Iernut TPP	Gas	800	800	9.71	2493.624	9.92
16	Paroseni CHP	Coal & Gas	300	100	1.21	175.676	0.70
17	Rovinari TPP	Coal & Oil	1,320	1,320	16.02	4,614.366	18.37
18	Turceni TPP	Coal & Oil	2,310	1,320	16.02	4,744.051	18.88
Total			11,303	8,238	100	25,125.057	100

Table 9 – Summary of Potential Hydroelectric Assets to be Privatized

№	Branch Name	No. of HPP & PS	General Area of Operation	Installed Capacity		Annual Energy			
						2000		2001	
				MW	%	GWh/y	%	GWh/y	%
1	Ramnicu Valcea	34	Lotru, Olt	1,625	35.56	3,795	39.91	2,768	38.88
2	Bistrita	21	Bistrita, Siret, Prut	636	13.92	1,656	17.42	1,413	19.85
3	Cluj	17	Somesul Cald, Cris, Dragan, Iad	539	11.79	997	10.48	1,048	14.72
4	Curtea de Arges	26	Arges, Dambovita, Raul Targului	521	11.40	956	10.05	585	8.22
5	Hateg	12	Raul Mare	485	10.61	683	7.18	480	6.74
6	Sebes	4	Sebes	346	7.57	606	6.37	280	3.93
7	Targu Jiu	6	Cerna, Motru, Tismana, Jiu	193	4.22	449	4.72	238	3.34
8	Caransebes	3	Bistra Marului, Cerna	148	3.24	164	1.72	178	2.50
9	Buzau	4	Buzau	77	1.68	203	2.13	130	1.83
Total		127		4,570	100	9,509	100	7,120	100

2. The Case for Bundling Thermal and Hydro Units

As alluded to earlier in the opening section entitled Relevant Background, the asset ownership side of the Romanian electricity sector has undergone profound changes over the past several years. For instance, in the year 2000 when the vertically integrated monopoly of CONEL was abolished and restructured into generation, transmission, and distribution activities, generation assets were further unbundled along energy technology/fuel source lines such that Termoelectrica would be responsible for owning, operating, and maintaining all coal, lignite, fuel oil, and gas-fired generating facilities, while Hidroelectrica would have similar responsibilities for all hydroelectric plants, cascades, and pumped storage units.

The eventual long-term impact of such a decision has been that while Romania has moved to more open and competitive electricity markets, merit order dispatches have strongly favored hydro units over thermal units due to their considerably lower costs of generation. In this regard, according to ANRE, the average wholesale price of electricity in Romania today is \$39-\$40 per MWh for thermal capacity, \$23-\$25 per MWh for nuclear capacity, and \$10 per MWh for hydro capacity. Indeed, even at these prices, Termoelectrica is unable to cover its current costs of generation, and is estimated to be losing over one million U.S. Dollars per day. As a result, Hidroelectrica is largely seen as a fairly competitive, low-cost, and extremely profitable parastatal utility, while Termoelectrica is viewed as a highly inefficient operation with significant maintenance backlogs and environmental retrofit liabilities from non-compliant plants.

Therefore, if the Government of Romania expects to be able to stimulate increased competition in the electricity sector, while at the same time leverage private capital to undertake necessary plant modernizations and environmental retrofits through the privatization process, then it must be willing to revisit this earlier restructuring decision. The hard truth is that the only way to create a generation asset package that will be perceived as attractive to potential strategic investors, IPPs, and utility operators is to offer a blend of thermal and hydro assets, through outright ownership of thermal units and long-term concession or lease of hydroelectric facilities that cannot be sold under current law. Only blended asset bundles stand a chance to be competitive over the longer run against both Hidroelectrica and NuclearElectrica. Alternatively, the Government of Romania could offer shares in Termoelectrica, but this particular entity currently has an overall negative value in the eyes of most potential investors, as well as several influential international financial institutions. Similarly, the Government could offer asset bundles consisting solely of thermal power plants. However, there is no interest whatsoever in today's marketplace for acquiring generation assets that will never be able to compete against state-owned hydroelectric and nuclear generating facilities. Indeed, every potential investor or key lender that the Hunton & Williams team interviewed during the course of this engagement stated unequivocally that to attract their interest, any Romanian generation asset package must be comprised of both thermal and hydro units, otherwise they were simply not interested in participating in such a privatization bid or offering.

Thus, a key privatization recommendation is that the Government of Romania should provide generation asset bundles containing both thermal and hydro units so as to assure a positive investor response, especially for the first major offering. In this regard, based on calculations presented in Section 6 of the Final Report, Hunton & Williams recommends that as a targeted goal, each generation asset bundle should contain a blend of between 2,200 and 2,300 MW of available power capacity. According to ANRE, four such bundles should be made available over the shortest time period possible to insure robust competition within the sector. In addition, ANRE feels strongly that to insure the new owners of these bundles will have staying power in the marketplace, the Government of Romania must agree beforehand to retire approximately 4,000 MW of aging surplus thermal capacity according to a specified time schedule.

Moreover, in an attempt to attract the maximum number of potential qualified investors with the broadest generation-type interests, it is further recommended that, ideally, these bundles be differentiated as follows: one bundle should be anchored with a major coal-fired power station that is in reasonably good operating condition with the balance of available capacity being made up of hydro units; another package should be anchored with a major hydro cascade complex with the balance of available capacity comprised of coal or oil-fired capacity requiring major environmental retrofits to meet EU emission standards; a third should consist primarily of oil and gas-fired units with the balance in hydro capacity; and a fourth should be a mix of various thermal fuel sources along with the remainder of hydro units designated for privatization. In this regard, Hunton & Williams has developed illustrative or indicative bundles, which attempt to allocate available hydro cascades and thermal power plants that are essentially free of burdensome debt and less than thirty years of age into four such mixed power generation packages. Moreover, the Hunton & Williams team believes that such bundles could be further enhanced if they contained geographically diverse units so as to provide broader national coverage and access to a greater number of privatized distribution companies in the future. The results of this preliminary exercise are presented in Appendix A to this Executive Summary. However, it should be cautioned that these are preliminary results and suggestions only, and have not yet been accompanied either by site visits or else been subjected to even the most cursory of due diligence reviews in the field.

One of the stated goals of the Government of Romania has been to develop a solution that included suppliers to the electricity sector, potentially even combining certain coal mines with generation companies that they supply before the privatization transaction and offering these as a package to investors. While such a strategy has been tried on a very limited basis in certain instances in Germany and Poland, we believe this combination would generally discourage investors and do not recommend it as a whole. As part of a follow-up Phase II initiative, Hunton & Williams would recommend evaluating whether a combination of coal mines with coal-fired generation facilities in one or two unique situations (such as high quality lignite coal mines) could be attractive for investors; however, we generally would discourage this approach.

3. Suggested Electricity Market Structure by the Year 2004

If the Government of Romania adopts and implements the proposed Hunton & Williams privatization strategy, then the electricity market structure by the year 2004 will be comprised of the following operating components:

- Two privately owned asset bundles of approximately 2,200–2,300 MW each in available capacity structured as joint venture companies with both Termoelectrica and Hidroelectrica collectively owning not greater than 39.99 percent of the outstanding shares in each of the newly created joint venture companies
- Two state-owned asset bundles consisting of approximately 2,200-2,300 MW in available capacity from both thermal and hydro assets, with Termoelectrica and Hidroelectrica jointly owing 100% percent of the shares in each bundle
- NuclearElectrica with approximately 700 MW in installed nuclear capacity
- Hidroelectrica with 1,335 MW in strategic assets and 636 MW in available hydro capacity from the Bistrita Cascades that was not made available for privatization due to age, advanced reservoir silting, and potential structural problems and liabilities associated with the largest dam in the cascade which first began commercial operation in 1957, as well as 21 unfinished hydro sites
- Termoelectrica with approximately 2,230 MW in currently available capacity from Deva, Bucharest South, and Braila, all of which have been, or are in the process of being upgraded under international loans, plus approximately 4,000 MW in aging and obsolete capacity that will be in the process of being retired over time according to an agreed upon schedule

At the same time, both Termoelectrica and Hidroelectrica will be midway through the process of being transformed primarily into “parent,” or “holding” companies, since in addition to retaining operational control of certain strategic assets, three of the most efficient upgraded plants, and units that have not yet been privatized or retired, they will also collectively hold up to 39.99 percent of the outstanding shares in each of the two newly created joint venture companies. An illustration of this proposed market structure in 2004 is presented in Exhibit 1 below.

The strategic investors in Joint Venture Companies A and B will know who their competitors will be because Joint Venture Companies C and D will already have been created and the remaining Termoelectrica and Hidroelectrica companies will no longer be in a position to eliminate their privately-owned competitors. Their market shares will still be larger than those of the privately-owned companies but their ownership structures will have been dispersed. An illustration of the market shares of each Joint Venture Company and the remaining state-owned companies is shown in Exhibit 1.

Exhibit 1 – Market Shares of Competitors in 2004

Generation Company	Available Capacity in 2004	Share of Total Market	Privatized Share of Market
Genco A (Privatized)	2,326	14.1	14.1
Genco B (Privatized)	2,340	14.2	14.2
Termoelectrica	2,903	17.6	-
Hidroelectrica	1,971	11.9	-
Genco C (Termo/Hidroelectrica)	2,319	14.0	-
Genco D (Termo/Hidroelectrica)	2,284	13.8	-
Smaller CHPs	1,688	10.2	-
Nuclear Electrica	700	4.2	-
Totals	18,535	100%	28%

4. Ultimate Electricity Market Structure Within Five Years

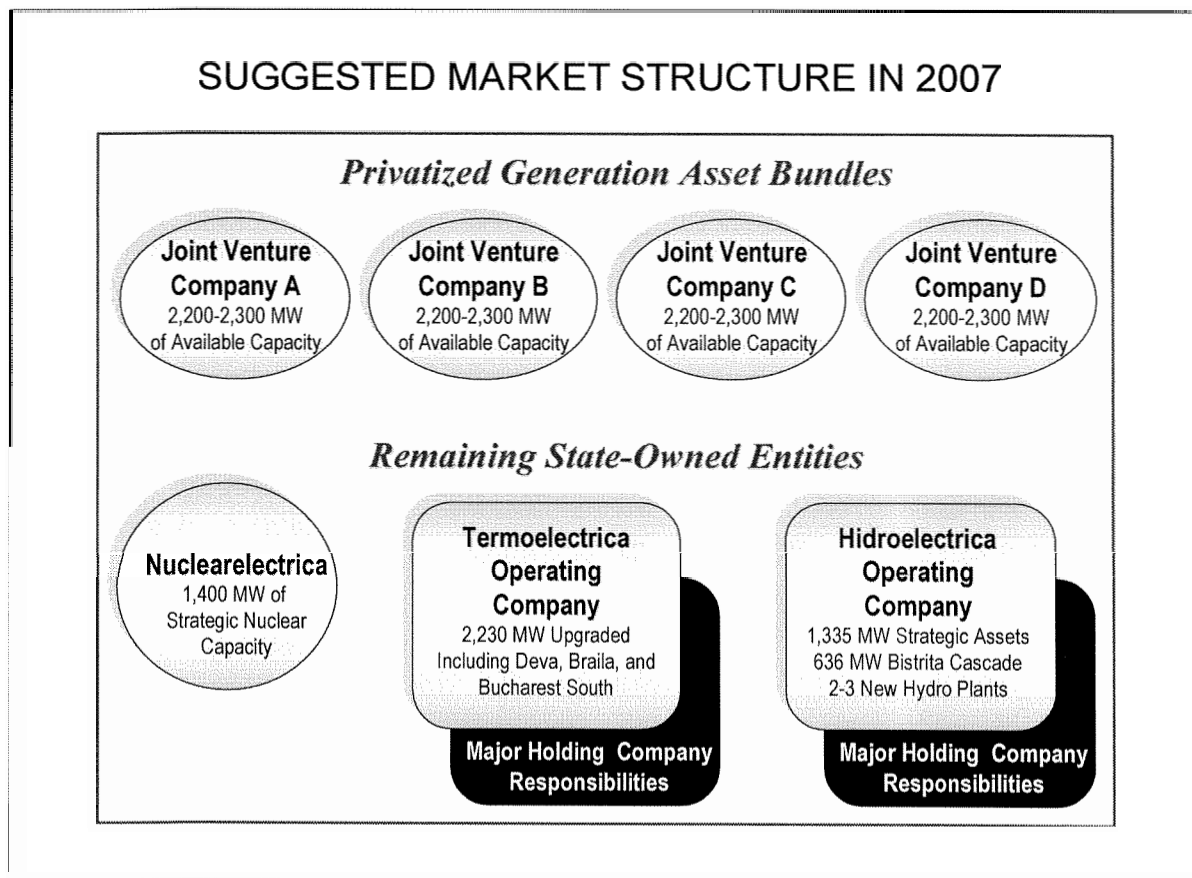
If the Government of Romania continues to implement the proposed Hunton & Williams privatization strategy over the longer term, then by the year 2007 the Romanian electricity market will have been transformed into the following highly competitive market structure with lower electricity tariffs than might otherwise have been possible in the absence of such a privatization process:

- Four privately owned asset bundles of approximately 2,200–2,300 MW each in available capacity structured as joint venture companies with both Termoelectrica and Hidroelectrica collectively owning not greater than 39.99 percent of the outstanding shares in each of the newly created joint venture companies, although both parastatal utilities/holding companies may choose to sell a portion of these shares over time either to the current strategic investors, new financial investors that might be interested in owning preferred shares in a going concern, or perhaps through an initial public offering on the Bucharest Stock Exchange as it begins to mature as a viable equities market
- NuclearElectrica with approximately 1,400 MW in installed nuclear capacity, assuming that Cernavoda Nuclear Unit No. 2 is completed as scheduled
- Hidroelectrica will still remain with 1,335 MW in strategic assets from Iron Gates I & II and 636 MW from the Bistrita Cascade, as well as any of the 21 unfinished hydro sites that it chooses to complete from internal cash flows
- Termoelectrica will still remain with approximately 2,230 MW in currently available capacity from Deva (Mintia TPP), Bucharest South (Bucharesti Sud CHP), and Braila, which are some of the most

competitive and recently upgraded thermal plants in the country, plus whatever residual units remain to be retired according to the previously agreed upon schedule

- Finally, both Termoelectrica and Hidroelectrica will now both be in a better position to float shares independently of the various joint venture companies that have been created, regardless of the ultimate share ownership they may choose to retain in these companies over the longer run

By this point in time, both Termoelectrica and Hidroelectrica will have been fully transformed into holding companies, although they will still have operating subsidiaries responsible for maintaining strategic assets and facilities that require debt servicing. More importantly, the sector will have been reshaped into a highly competitive market with seven major operating utilities, of which five will have roughly similar installed capacity and operating complexity, and be on sounder financial footing to undertake required modernization and upgrade programs to meet EU environmental emission standards. At this point, the wholesale price of power will be cheaper, and the promise of lower electricity tariffs to Romanian residential consumers as well as commercial and industrial ratepayers should finally become a reality. In any event, an illustration of this proposed longer-term market structure by 2007 is presented in Exhibit 2 below.



5. Specific Characteristics of the Proposed Hunton & Williams Privatization Strategy

While the overall framework and basic market approach of the Hunton & Williams privatization strategy has already been outlined above, specific characteristics and details have not yet been presented. In developing such characteristics, the Hunton & Williams team began with the excellent feedback that it received from senior Government of Romania participants regarding reactions to privatization models utilized in emerging markets elsewhere in the world during the first USAID-sponsored Workshop on Generation Privatization Strategy and Support conducted on April 4-5, 2002.

Next, utilizing this feedback as guidance, the team borrowed applicable building blocks from the most successful privatization models used elsewhere, and adapted them to Romania's unique situation. The team then validated the resulting privatization model against the weighted preferences from the stakeholder survey. In addition, the team revisited ANRE, OPCOM, Ministry of Public Finances, and Ministry of Labor and Social Solidarity to insure that several of its potential specific recommendations were well within current law, still consistent with previous understandings regarding fund flows through Treasury and the creation of special disposition funds, and could be implemented in the near term primarily through Government Decisions rather than Parliamentary laws.

Finally, the team met with a number of interested strategic investors, IPPs, and major electric utility operators, as well as World Bank, EBRD, International Finance Corporation, Citibank, Export-Import Bank of the United States, and the Black Sea Trade & Development Bank in an effort to further validate the proposed Hunton & Williams generation privatization strategy, and to gauge both their interest and appetite for participation in the privatization of the Romanian generation sector—whether as potential investors or lenders.

The specific characteristics highlighted below describe a proposed privatization strategy that has been developed and successfully vetted through such an iterative process, including the following key aspects and components:

- The initial privatization phase offering will consist of two 2,200-2,300 MW bundles of combined thermal and hydro available capacity, with one being anchored by a major coal or lignite-fired power station and the other being anchored by a major hydro cascade as illustrated in Appendix A
- Each generation asset bundle will be offered preferably debt free or at a minimum, without burdensome debts
- The assets of each generation bundle will be owned by a Romanian joint venture company, with 60.01 percent of the shares held by the strategic investor and 39.99 percent of the shares held collectively by Termoelectrica and Hidroelectrică
- The strategic investor will acquire his shares and long-term concession rights for cash at terms and conditions to be agreed upon with the Government of Romania in a Purchase/Lease Agreement

- The share split between Termoelectrica and Hidroelectrica will be proportional to the average electricity production in GWh over the previous two years from the respective generating units being contributed for a given joint venture company
- It is not intended that Government should retain a “golden share” in any of these new joint venture companies or transactions, but rather that the private strategic investors will be permitted to exercise full management and operating control over all aspects of these enterprises, with a limited number of issues requiring a supra-majority vote (e.g., dissolution of the company)
- In addition, the Government of Romania through its thermal power asset management agent, Termoelectrica, must agree to retire approximately 4,000 MW in aging and obsolete installed capacity over an agreed upon period of time ideally concluding by the date set for the fourth and final generation asset bundle privatization offering
- So that these generation asset purchases can be financed on a project finance basis, ANRE will insure that an adequate number of annual portfolio contracts with Electrica and/or any newly privatized electric distribution companies are assigned to the joint venture company sufficient to cover at a minimum the principal and interest on loans to finance the purchase of that particular asset bundle plus the cost of required upgrades, fixed operations and maintenance expenses, and an adequate return to investors (possibly on the basis of a declining percentage of available capacity over time) until all loans to international financial institutions are repaid
- In return, the new joint venture company must agree to maintain minimum available capacity limits over time as specified in the tender documents and determined by ANRE to insure that sufficient reserve margins are available to the Romanian electricity market for the foreseeable future, especially during this extended period of transition
- In this regard, strategic investors should not be required to upgrade or refurbish any specific plants or facilities in their generation asset bundle, but rather be given the flexibility to meet these capability obligations in any manner they deem most cost effective
- Each new joint venture company must also agree to meet all specified European Union emission standards adopted by Romania in accordance with the compliance schedule established in the Environment Section for EU accession, whether by the retrofitting of existing available capacity, retirement and subsequent construction of new capacity, fuel switching, the use of carbon emission credits, or some combination of the above
- Failure to meet these mandated environmental standards by the joint venture company will result in the imposition of significant fines and

penalties, and possibly even the loss of power purchase contracts assigned by ANRE

- Coal mines should generally not be included with coal-fired generation facilities in a combined privatization offering, although the Hunton & Williams team recommends further study of one or two high quality lignite facilities before drawing final conclusions
- Consider divesting certain service operations that are part of Termoelectrica and Hidroelectrică's current operating structure, since these services may be more effectively provided in the future as part of an independent company
- Finally, a 50-75 million U.S. Dollar disposition fund will be created out of funds received by the Ministry of Public Finances from either the privatization sale of the first asset generation bundle or else a smaller amount from each bundle being privatized over time to help in mitigating the potential social impacts and workforce dislocations that are likely to occur as a result of privatization of Romania's power generation assets, especially those of Termoelectrica
- Such a temporary transition fund will be utilized for funding job placement and retraining programs for displaced workers, early retirement buy-outs for older employees, loans to small businesses established by displaced workers that can provide necessary support services to the electricity sector in the future, and depending on seniority, up to 24 months of base salary for severance payments to assist the worker and his family to transition to a new job or field of endeavor
- At the end of the transition period, all remaining funds will revert back to the Ministry of Public Finances, and be made available as general revenues to the Treasury.

6. Determination of Overall Financeability for the First Bundle

Assume that the first generation asset bundle to be offered for privatization by the Government of Romania contains roughly 2,300 MW of available mixed capacity, and that interested bidders are willing to offer a price equal to \$100,000 per MW for this capacity, or roughly \$230 million for the transfer of thermal assets and a long-term lease or concession for the hydro assets. Moreover, assume that this first bundle will require approximately \$350 million over a five-year period to either upgrade these facilities to meet EU emission standards or construct new plants to meet the minimum capacity availability obligations established by ANRE to maintain sufficient reserve margins for the country as a whole throughout this extended transition period. In addition, assume that soft costs such as project company costs before financial close, legal fees, financial arrangement and exposure fees, and interest during construction for retrofits will add another \$20 million to the cost of this transaction. This will result in total financing requirements of approximately \$600 million for this first indicative bundle. Finally, assume that the winning strategic investor decides to arrange the necessary capital for this

transaction in the following manner: \$500 million on a project finance basis and \$100 million out of future revenues and fuel cost savings over the next 5-7 years.

The question then becomes: Can \$500 million be raised for such a generation asset purchase in Romania today? More importantly, can a transaction of this magnitude be successfully structured on a project finance basis when such a deal would be the first project financing in the power sector? In trying to get answers to these questions, the Hunton & Williams team prepared a preliminary project finance scheme for such a transaction on a project finance basis, and vetted and refined this plan with the following international financial institutions: International Finance Corporation, European Bank for Reconstruction and Development, World Bank, Black Sea Trade & Development Bank, Export-Import Bank of the United States, Citibank, and Schneckervan Wyk & Pearson (a local investment firm which was instrumental in arranging a recent major bank loan for Termoelectrica without the pledge of a sovereign guarantee from the Government of Romania), as well as several potential strategic investors including AB Electro-Invest, Tractebel, and Union Fenosa among others. The results of this collaborative effort are presented in Appendix B of this Executive Summary. In short, the Hunton & Williams team is confident that, based on the responses received from these financial institutions and potential investors, such a transaction can indeed be successfully structured and financed on a limited recourse or non-recourse project finance basis in Romania today, if investors are able to purchase no less than 60.01 percent of the shares in a privatized energy bundle and sufficient off-taker agreements are established to allow both for recovery of certain costs and at the same time permit the development of a competitive and transparent market within several years of the initial investment.

III. Achievement of Important Political Goals

From an overall national political perspective, the proposed Hunton & Williams generation privatization strategy achieves several important political goals and objectives as indicated below:

- It addresses all major European Union accession requirements for the power generation sector in a timely and forthright manner, including resolution of all key issues raised during negotiations on the Energy, Market Reform, and Environment Sections;
- It generates commitments from investors to modernize and upgrade existing generation facilities and will also result in a more highly competitive electricity sector over time, with electricity tariffs to consumers that will be lower than they might otherwise have been without privatization;
- It raises considerable revenues that can to be used for high priority policy initiatives on a national scale, be directed back into the power sector to modernize and upgrade facilities that will remain under Termoelectrica and Hidroelectrica for the foreseeable future, be used to complete a number of the better projects among 21 uncompleted hydro sites, or else be utilized to upgrade CHP and district heating plants that are in the

process of being transferred from Termoelectrica to the municipalities; and,

- It provides a built-in solution for fairly and equitably dealing with displaced workers and their families that will in all probability result from privatization of Romania's generation assets by creating a temporary disposition fund to serve as a social safety net during this transition period.

IV. Mitigation of Probable Social Impacts and Disruptions

The proposed Hunton & Williams generation privatization strategy is also sensitive to the social and employment disruptions that will likely occur as all four generation asset bundles are privatized over time. In this regard, the H & W strategy includes the creation of a \$50-\$75 million temporary disposition fund to be used in the following manner:

- 1) To establish and maintain job placement and retraining programs throughout the entire period that the four asset bundles are being privatized;
- 2) To provide a funding source for possible early retirements so that the work force can be reduced through attrition over time rather than forced lay offs;
- 3) To provide loans to displaced workers who may be able to establish small businesses that offer needed products and services to the Romanian electricity sector that will become apparent following privatization, and
- 4) Depending on seniority, to provide lump sum settlements up to the equivalent of 24 months of base salary for severance payments to assist displaced workers and their families to transition to a new job or field of endeavor.

V. Creation of Greater Competition in the Electricity Sector

In addition, the proposed Hunton & Williams generation privatization strategy will definitely lead to immediate and sustainable competition in the Romanian electricity sector for the following reasons:

- 1) Initial market entrants will have staying power since two bundles of roughly 2,200-2,300 MW each will be offered at the same time to interested investors at the outset, which is considered to be of sufficiently large size and mix of generating assets that these new joint venture companies will be able to immediately compete with the state-owned companies, which will also have been restructured to ensure a more level playing field at the outset of privatization;
- 2) Also, as part of this overall transaction plan, the Government of Romania will have already agreed to a

mandatory retirement schedule for approximately 4,000 MW of installed surplus capacity that is considered aging, obsolete, and non-compliant so that predatory variable cost pricing is less likely to occur in an effort to hinder new market entrants; and,

- 3) Finally, in the longer run, the overall market structure for the generation sector will be comprised of seven fairly efficient generating companies, with at least five of them being of about equal size and operating complexity with similar costs of generation.

VI. Improving the Financial Strength of Public Sector Entities

Another important aspect of the proposed Hunton & Williams generation privatization strategy is that Termoelectrica and Hidroelectrica will continue to be influential and major participants in the Romanian power sector, but from a strengthened position as indicated below.

- 1) Both Termoelectrica and Hidroelectrica will still own and operate major generating assets, including some of the nation's most efficient and competitive power generation facilities;
- 2) They will also evolve into major holding companies in a revamped market economy with far greater management responsibilities for top executives and senior administrators;
- 3) As such, they will still retain a significant shareholder position in each of the new joint venture companies, as well as be allotted several seats on the Board of Directors for each of these new enterprises;
- 4) More importantly, however, both parastatal companies will become more financially viable after privatization, and may finally even be in a position to raise additional capital expansion and retrofit funds through future bond offerings as a result of their improved financial status and credit ratings;
- 5) For example, Termoelectrica will no longer be losing over one million U.S. dollars a day, since it will have retired obsolete capacity as well as transferred responsibility for maintaining under performing assets and upgrading non-compliant facilities onto the new private sector owners, who are presently in a sounder financial position to undertake such efficiency improvement and environmental retrofit upgrades; and,

- 6) Similarly, Hidroelectrica will retain control over the nation's single most profitable generating asset, while transferring concessions to the private sector for most of Romania's remaining hydro facilities that will soon require major overhauls and modernization programs.

VII. Attainment of EU Environmental Standards Over Time

The proposed Hunton & Williams generation privatization strategy will also enable the Government of Romania to meet its European Union accession requirements and obligations in the key area of environmental emission compliance and reductions over time by leveraging private sector capital to best advantage. In this regard, the H & W proposal envisions that:

- 1) Each new joint venture company will assume responsibility for meeting and maintaining EU emission standards for their particular bundle in accordance with the overall schedule agreed upon by the Government of Romania in the EU Section on Environment;
- 2) The specific method of compliance will be left up to the new owners of the generation assets, and may possibly include a combination of one or more technical and policy approaches such as major environmental retrofits of existing available capacity in the bundle, replacement of old or non-compliant capacity in the bundle with new facilities designed to meet such standards, fuel switching to the extent that it is feasible, and the purchase of carbon emission credits; and,
- 3) Finally, failure to fully comply with or meet these mandated environmental standards by the new asset owners in accordance with previously agreed upon schedules will result in the immediate imposition of significant penalties, and possibly even the loss of power purchase contracts assigned by ANRE.

VIII. Views of Potential Investors and Lenders

Lastly, the proposed Hunton & Williams generation privatization strategy was developed with a view in mind that to be entirely successful during the implementation phase, such a strategy would have to accommodate certain criteria that would be of high interest to potential investors, while at the same time meet minimum prerequisites from the international financial community. As such, the Hunton & Williams team sought out the opinions of several major strategic investors. IPPs, and utility operators, as well as the views of several multilateral development banks, commercial banks, export credit agencies, and investment bankers. These opinions and views can be boiled down into essential elements that are considered non-negotiable. These include:

- 1) The new joint venture companies that will be created under this strategy must have unambiguous operating control over both the company and assets transferred to it, meaning in the case of Romania, no more than 39.99 percent of the shares remaining under Government control and no possibility of governmental hindrance through the form of a “golden share”;
- 2) The asset package to be offered must contain hydro as well as thermal power plant assets so that the bundle has a chance to be both profitable and competitive in today’s market if the overall package is operated in an efficient manner;
- 3) Each bundle must be comprised of mixed assets totaling at least 2,000 MW in available capacity, as opposed to installed capacity; to be considered attractive in today’s market; and,
- 4) Finally, since these bundles will be financed on a limited recourse or non-recourse project finance basis, existing power purchase agreements sufficient to cover principal, interest, and fixed operations and maintenance expenses will have to be assigned to each asset bundle until such time as all senior debt has been retired.

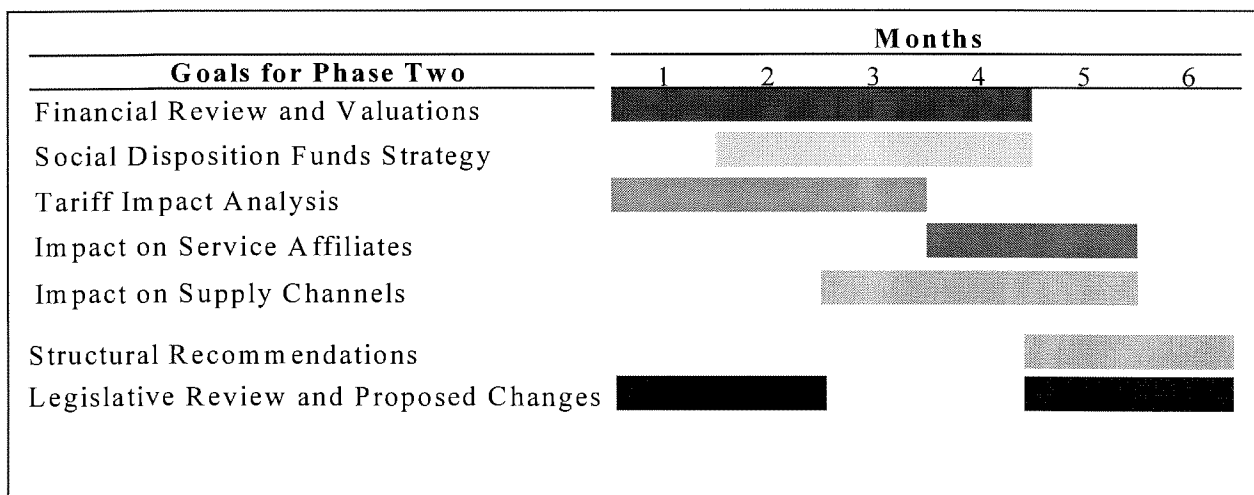
IX. Recommended Next Steps

We recommend that the Government of Romania categorize generation sector privatization into three distinct phases. The first phase has focused on the development of a sector-wide strategy that can best address the goals and needs of the various constituents impacted by reform of the power generation sector in Romania. As a result of this effort, we anticipate that the Government will agree on a strategy for the generation sector and establish the legal structure and framework for future privatization transactions. This phase includes the recommended bundle strategy prepared by the Hunton & Williams team. During Phase Two, the Government begins the implementation of its strategy developed under the first phase by preparing individual generation enterprises for privatization. This phase should include a more detailed analysis of each generation facility that may be a part of the privatization program, which will be detailed below. Phase Three, or privatization implementation, would include the actual sale process of offering generation companies to potential investors, contacting those investors, soliciting bids, and negotiating final transactions.

The Hunton & Williams team recommends that the Government of Romania agree on a strategy and continue with privatization preparation as soon as possible. We advise that the Government conduct a more detailed analysis in several specific areas that will increase the probability of a successful outcome and recommend the following list of goals that should be accomplished during Phase Two of its broader privatization program:

- 1) Financial Valuation of assets to ensure that the indicative bundles suggested by the Hunton & Williams team are equally competitive and, if not, to redistribute the assets.
- 2) Evaluate options for structuring and distributing proceeds in the social welfare fund created by the privatization. This review should include a study of applicable Romanian law and suggest any changes to the current legal framework that would be necessary to accommodate such a fund.
- 3) Review the impact on future tariff prices of: (1) adopting the bundling strategy proposed in this report; and (2) retaining the current market structure.
- 4) Review the impact of the "bundling" proposal on Termoelectrica's existing "services" affiliate.
- 5) Evaluate the impact of the bundling proposal on the mining sector that supplies many of Termoelectrica's generation facilities and reach definite conclusions on whether any of the mines should be included in a privatization offering to investors.
- 6) After further review of financial and technical capabilities within the generation sector, recommend the most appropriate privatization and capitalization structure for assets that will be offered to investors.

The Hunton & Williams team believes that the goals outlined above for Phase Two of the privatization program can be accomplished in approximately six months. Assuming that the Government desires to move ahead with its privatization program by the autumn of 2002, this Phase could be completed early in 2003 and generation sector privatization offerings could be announced by next spring. The following timeline provides a general overview of the time necessary to complete each of the goals for Phase Two recommended above:



The completion of Phase Two in a timely manner will allow the Government of Romania to remain on schedule to achieve the goals for privatization outlined in its Medium-Term Energy Strategy. Specifically, the Government has set out to achieve privatization of 25% to 40% of its generation sector by 2004. Given the extensive review and due diligence that is typically a part of any privatization involving power generation facilities in emerging market countries, we believe it is very important for the Government to proceed quickly with the action plan outlined above so that the initial privatization transactions can potentially be completed during 2004. The schedule below provides a timeline for completing each phase of the privatization process that has been developed by the Hunton & Williams team, including the completion of transactions involving the initial two generation bundles as outlined in this report:

